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## **ATTACHMENTS**

Attachment I	Employee Training Record
Attachment II	Grease Trap Maintenance Log
Attachment III	Grease Recycling/Rendering and Grease Trap and Grease Interceptor Service Providers

## 1.0 What is FOG?

FOG is a combination of fats, oils and grease used in food processing and in preparation of meals. FOG bearing materials, among others, include: cooking oil, fat, lard, grease, butter, tallow, shortening, and margarine.

### 1.1 How Does FOG Affect You?

Kitchen waste as well as water that has been used to wash kitchen equipment and floors, contains waste FOG. When waste FOG is poured down the drain and into the sewer lines, it cools and solidifies restricting or clogging sewer lines. All too often, fats, oils and grease from cooking and food preparation are washed into the plumbing system, (usually through kitchen sinks and floor drains found in food preparation areas) and stick to the insides of sewer pipes both on your property and in the streets. Over time, fats, oils and grease build up and eventually **block the entire pipe** causing sewage backups and overflows. As sewer pipes back up, sewage and food particles that accumulate can attract insects and other vermin and create potential health hazards. Property damage can result from sewage backups leading to expensive cleanup and plumbing repairs that may have to be paid for by you. Sewage spills and backups can result in County Health code violations that can lead to the **closure of your business operations**.



FOG Blockage in Sewer Pipe

### 1.2 The City of Huntington Beach FOG Control Program

To eliminate FOG related sewer spills and backups, the City has adopted an aggressive maintenance program to frequently inspect and clean the City's sewer lines. However, the City has determined that the most effective way to minimize FOG accumulation in sewers is to prevent the introduction of FOG into the sewer system in the first place. To realize this goal, the City has developed a FOG Control Program that regulates restaurants and other food service establishments (FSEs) and provides them with a mechanism to help control and minimize the introduction of FOG into City sewers. The City of Huntington Beach FOG Control Program uses a three-pronged approach:

- Public outreach and education
  - Public outreach programs educate commercial business operators/owners and residents on the problems associated with improper disposal of FOG and encourage the application of Best Management Practices (BMPs) in handling of waste FOG.
- Food Service Establishment (FSE) FOG Control Program
  - The FSE FOG Control program provides the City, through the FOG ordinance, with the authority to inspect and monitor the implementation of BMPs.
- Enhanced sewer maintenance and cleaning
  - Enhanced sewer maintenance activities are scheduled as a result of the City's inspection of the sanitary sewer system using a closed circuit television (CCTV) inspection system.

## **2.0 How to Achieve Compliance with the Food Service Establishment (FSE) FOG Control Program**

As an owner or operator of a restaurant or other food service establishment, achieving compliance with the City's FSE FOG Control Program will require the implementation of the following BMPs that are designed to eliminate or limit to the maximum extent practical, the introduction of FOG into the sewer system:

- Employee Training and Awareness program
- "Dry Wiping" Pots, Pans, Dishware and Work Areas to Remove Grease
- Proper Disposal of Food Waste and Solids to Prevent Leaking and Odors
- Spill Prevention and Proper Clean Up Methods
- Drain Screening
- Proper Dish Washing and Equipment Cleaning
- Recycling FOG
- Maintenance of Kitchen Exhaust Filters
- Posting "No Grease" Signs
- Maintenance of Grease Traps and Grease Interceptors

The "Best Management Practices (BMPs) for Food Service Establishments" Training Manual has been developed by the City of Huntington Beach to assist you in developing simple easy to follow steps and procedures to prevent FOG from entering the sanitary system. The manual covers all the basic elements of FOG elimination and is a helpful tool for you to use to convey the message to your staff and achieve compliance with the FOG Control Program.

## **3.0 Employee Training and Awareness Program**

The success your establishment's Best Management Practices (BMPs) program to eliminate Fats, Oils, and Grease or FOG from entering your sewer system is largely dependent upon employees. The City of Huntington Beach requires the training of all employees **at least twice a calendar year** on the following subjects:

- How to "dry wipe" pots, pans, dishware and work areas before washing to remove grease
- How to properly dispose of food waste and solids prior to disposal in trash bins or containers to prevent leaking and odors
- Spill Prevention and proper cleanup methods, including training employees on the location and use of absorption products to clean under fryer baskets and other locations where grease may be spilled or dripped.
- How to properly dispose of grease or oil from cooking equipment into a grease receptacle such as a grease collection barrel or drum without spilling



Employee training must be documented and employee signatures retained indicating each employee's attendance and understanding of the practices reviewed. Please use the Employee Training Record (Attachment I) to document all employee training related to the FOG program.

All training records must be kept on site at all times and made available for review at any reasonable time by the City of Huntington Beach.

The following sections cover the required training elements as required by the City of Huntington Beach. The italic bold texts are recommendations for restaurant managers/supervisors on methods to convey the message/training to employees. These are only recommendations that may or may not work for your food service establishment and should be used accordingly.

### **3.1 “Dry Wiping” Pots, Pans, Dishware and Work Areas to Remove Grease**

Removing food waste by implementing “dry wiping” methods such as scraping, wiping or sweeping before using wet methods that use water will prevent FOG from entering your sewer system where it could eventually cause an expensive blockage. Wet methods typically wash the water and waste materials into the drains where it eventually collects on the interior walls of drainage pipes. By “dry wiping” food waste and oil into garbage receptacles, the material will not be sent to the grease traps and interceptors. This will also reduce the amount of material going to grease traps and interceptors, which will require less cleaning and reduce maintenance costs.

***Train employees on how to properly “dry wipe” pots, pans, and dishware and to dispose of food scraps into trash receptacles. Use rubber scrapers (squeegees), paper towels or other disposable non-washable material to “dry wipe” greasy kitchenware and utensils. Cloth towels or other washable materials should not be used to “dry wipe”. To practice “dry wipe” clean-ups:***

- ***Use rubber scrapers to remove food particles, fats, oils and grease from cookware, utensils, chafing dishes and serving ware. Place the removed food particles and FOG in the garbage.***
- ***Use paper towels to wipe down all work areas and all greasy pots, pans, and other kitchen before washing or soaking.***
- ***Use food grade paper to soak up oil and grease under fryer baskets.***

### **3.2 Proper Disposal of Food Waste & Solids to Prevent Leaking & Odors**

Leaking trash receptacles are a common problem that invites vermin such as roaches, rats, and flies. To prevent leaking trash receptacles and odors, all liquid waste and food scraps should be properly containerized in leak-proof containers or in sealed bags.

**Train employees on how to:**

- ***Double bag all liquid wastes to prevent leaks.***
- ***Call your waste hauler (Rainbow Disposal) at (714) 847-3581 to replace leaking and/or damaged refuse bins.***
- ***Contact Rainbow Disposal to increase your refuse service frequency if you have over-flowing refuse bins.***
- ***Keep the lids to refuse bins closed at all times when refuse bins are not actively in use.***
- ***Clean the trash enclosure on a frequent basis.***



### **3.3 Spill Prevention and Proper Clean Up Methods**

Preventing spills reduces the amount of waste on food preparation and serving areas that will require clean up. In addition, a dry workplace will help to avoid slips, trips and falls. For spill prevention:

- Empty containers before they are full to avoid spills.
- Use a cover when transporting spillable materials, particularly liquid wastes containing fats, oils and grease.
- Provide employees with proper tools, e.g., ladles, ample containers, to transport materials without spilling.

***Practice effective spill containment and clean up. Spills of dry ingredients should be swept up or vacuumed to prevent them from being washed into sinks or floor drains. For FOG spills, train employees on how to:***

- ***Block off all sinks and floor drains near the spill.***
- ***Cover the spill with absorbent material, e.g., sand, saw dust, kitty litter, salt, paper towels.***
- ***Sweep up spilled material and place it in the garbage.***
- ***Use wet cleanup methods only to remove trace residues.***

*Establishments that use large amounts of cooking fats, such as deep fat fryers, should develop and post their spill response procedure, in addition to maintaining spill containment and absorbent supplies. All employees should be trained on spill containment and on proper spill clean-up methods.*



### **3.4 Drain Screening**

Excluding food particles from the wastewater system can eliminate a large amount of FOG from an establishment's discharge. To implement this, install a fine meshed screen (1/8-inch or 3/16-inch screen openings are recommended) in the drain of each kitchen, mop and hand sink.

Train employees on the following:

- How to clean drain screens frequently and dispose of the collected material in the garbage.
- How to replace damaged or missing screens.



### **3.5 Dishwashing and Equipment Cleaning**

Proper dishwashing and cleaning methods can reduce the entry of solids and FOG into the wastewater system. These methods include:

- Posting "No Grease" signs above sinks and on the front of dishwashers. Signs should be written in the language(s) that are commonly spoken by employees. *Signs will be provided to you by the City of Huntington Beach.*



Train employees on how to:

- *Use a rubber spatula to squeegee down the sides of deep fat fryers before washing while grease and oil are still warm then wiping the fryer down with paper towels. All excess grease and oil should then be placed into a waste grease container and the paper towels should be disposed of in the garbage.*
- *Empty the contents of grills and roaster/broiler drip pans into a waste grease container and then wiping them down with paper towels prior to washing. Dispose of the paper towels in the garbage.*
  - *Pour all liquid grease and oil from pots and pans into a waste grease container and how to scrape out the solidified grease if present.*
  - *Capture accumulated oil during the cleaning of stoves and ventilation/exhaust hoods with paper towels and how to dispose of it in the garbage after absorbing all free liquid.*

**Dispose of fats, oils and grease where they belong.**



### **3.6 Recycling FOG**

Think of oil and grease as a valuable commodity. When using deep fat fryers or any process that requires or produces large amounts of plant or animal byproducts, collect the oils and fats. Recycle the oils and fats through one of the area's recycling companies (see Attachment III for a listing of waste cooking oil and grease recycling companies). This is the required method of disposal for food service establishments that produce any volume of food waste.

To recycle FOG, train your employees to:

- *Never dispose of fryer vat waste oils and fats down the drain.*
- *Collect and store fryer vat waste in a rendering tank. Most recycling companies will provide outside receptacles for storage until pickup.*
- *Secure FOG collection receptacles. These receptacles (or barrels/drums) must be covered at all times and the area(s)*



*around the receptacles must be free of spills and residue. The*

*receptacles must also be maintained in good working order and be free of leaks. If located in an area exposed to the general public (i.e., alleyway, side-lot), the receptacles must be securely fastened or tied down to prevent spills due to accidents or vandalism.*



### **3.7 Maintenance of Kitchen Exhaust Filters**



Routinely clean kitchen exhaust system filters. If filters are not cleaned on a regular basis, grease and oils escape through the kitchen exhaust system, and can accumulate on the roof of your establishment and eventually enter the storm drain system when it rains.

For cleaning and maintaining exhaust filters, train your employees to clean the filters before there is an excessive buildup of grease. If the filters are cleaned on the premises, make sure the runoff from the filters flows through the grease trap or interceptor if your facility has one. If not, contract with a service company to

professionally clean your kitchen hood filters. However, if this is not feasible, the filters can be cleaned using the following method:

***When cleaning hood filters, train your employees on how to:***

- ***Place the hood filters over a kitchen garbage bin making sure that the bin is double lined (use two or more garbage liners).***
- ***Spray minimal amounts degreaser on the dirty hood filters to loosen the grease. Allow the excess degreaser to drip into the garbage bin.***
- ***Use a paper towel to wipe down the hood filters once the degreaser has been applied.***
- ***Dispose of the paper towel in the garbage.***
- ***Wash the hood filters with soap and hot water once all the excess grease has been removed.***

Spraying hot water with little or no detergent over a mop sink connected to a grease trap or interceptor can also effectively clean hood filters. After a hot water rinse (drain must be connected to a grease trap or interceptor), filter panels can go into the dishwasher. For hoods to operate properly in the removal of grease-laden vapors, the ventilation system will also need to be balanced with sufficient make-up air.

### **3.9 Post “No Grease” Signs**

Post “No Grease” signs at all drains and sinks to remind your staff that no FOG is to be poured down the drain. This will serve as a constant reminder for your employees to properly recycle waste oil and grease and to dispose of food waste in the garbage and not down the drain.

As part of the educational for FSE’s, the City of Huntington Beach will provide your facility with “No Grease” signs and other posters and informational brochures that you can use to educate your staff on proper recycling and disposal methods for FOG.



## **4.0 Definition of Grease Trap and Interceptor and Maintenance Requirements for Grease Traps and Grease Interceptors**

### **What is a Grease Trap?**

Grease traps are devices that are typically located inside a food service facility and are designed to collect, contain or remove food wastes and grease from the waste stream while allowing the balance of the liquid waste to discharge to the wastewater collection system by gravity.



**Indoor Grease Trap**



**Outdoor Grease Trap**

### **What is a Grease Interceptor?**

A grease interceptor is a device that is located underground and outside of a food service facility designed to collect, contain or remove food wastes and grease from the waste stream while allowing the balance of the liquid waste ("gray water") to discharge to the wastewater collection system by gravity.

### **Maintenance of Grease Traps and Grease Interceptors**

For grease traps and/or grease interceptors to be effective, the units must be properly sized, and maintained to allow for adequate retention time for settling and accumulation of FOG. Inspecting and cleaning of your grease traps and/or interceptor is critical to ensure that your grease interceptor/trap is functioning properly and should be conducted on a frequent basis. **Typically, grease traps will need to be cleaned at least once a week and grease interceptors will need to be cleaned at least once every three months (or quarterly).**



**Grease Interceptor Manhole**



**Typical Grease Interceptor**

However, the required maintenance frequency for your grease interceptor and/or grease trap depends greatly on the amount of FOG your facility generates as well as any BMPs that your establishment implements to reduce the FOG discharged into the sanitary sewer system. In many cases, an establishment that fully implements BMPs will realize financial benefit through a reduction in their required grease interceptor and grease trap maintenance frequency.

Here are some basic maintenance requirements for grease traps and grease interceptors:

- FSEs are required to inspect and clean indoor grease traps weekly and outdoor grease interceptors should be serviced at least once a quarter (every three months) regardless of size and capacity. These devices are less effective if the grease occupies greater than 25 percent of the holding capacity. If the grease occupies greater than 25 percent of the grease interceptor's/trap's holding capacity, FSEs are required to perform a full cleaning of the grease interceptor/trap (removing all liquids and solids and scraping the walls).
- For grease traps, if less than 75 percent of the trap capacity remains, the trap should be cleaned more often than once per week. When inspecting and/or cleaning your grease trap, confirm that the grease traps contain their internal baffles and inlet piping flow

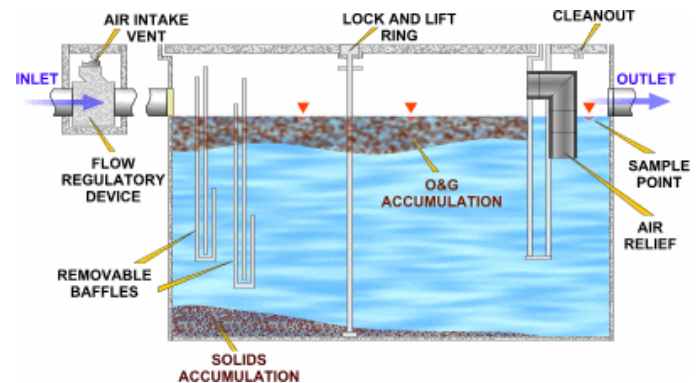


restrictors/air relief during every inspection and cleaning. These components aid in grease removal by reducing turbulence and increasing holding time within the trap.

- FSEs are required to maintain a record that documents the cleaning activities for indoor grease traps. Records should include the name of employee who performed the cleaning, date/time of cleaning, amount of grease removed and the disposal location for the grease. A sample maintenance log (see Attachment II – Maintenance Log) has been provided for your use and should be utilized to document the inspection and cleaning of your grease trap.
- Grease interceptors should be serviced at least once every three months by a licensed grease hauler. A list of service providers in your area has been provided (see Attachment III - Grease Recycling/Rendering and Grease Trap and Grease Interceptor Service Providers).

## 4.1 Grease Trap Maintenance

A proper maintenance procedure for a grease trap is outlined below:

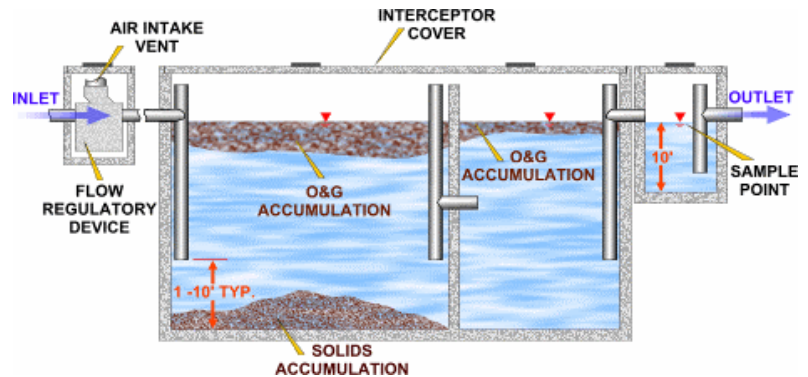


Steps	Actions
1.	Bail out any water in the trap or interceptor to facilitate cleaning. The water should be discharged to the sanitary sewer system.
2.	Remove baffles if possible.
3.	Dip the accumulated grease out of the interceptor and deposit in a watertight container.
4.	Scrape the sides, the lid, and the baffles with a putty knife to remove as much of the grease as possible, and deposit the grease into a watertight container.
5.	Replace the baffle and the lid.
6.	Record the volume of grease removed on the maintenance log (see Attachment II).
7.	Contact a hauler or recycler for grease pick-up.

## 4.2 Grease Interceptor Maintenance

Grease interceptors, due to their size, will usually be cleaned by grease haulers or recyclers. Licensed septic haulers can also pump out grease interceptors and haul the waste to a treatment plant.

The proper maintenance procedures for a grease interceptor are outlined below:

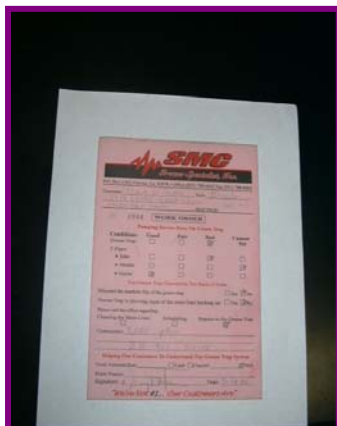
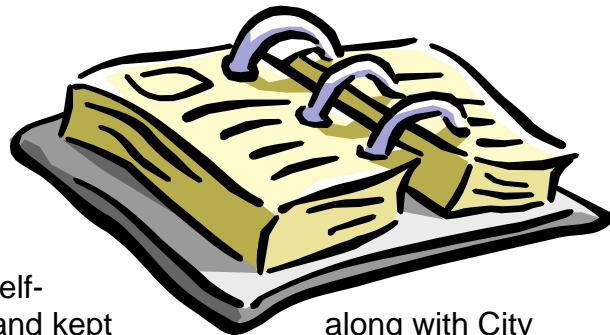


Steps	Actions
1.	Contact a grease hauler or recycler for cleaning. See Attachment III for a listing of grease haulers and interceptor maintenance service providers,
2.	Ensure that all flow is stopped to the interceptor by shutting the isolation valve in the inlet piping to the interceptor.
<b>The Following Steps Should Be Performed By a Licensed Grease Hauler</b>	
3.	Remove the lid and bail out any water in the trap or interceptor to facilitate cleaning. The water should be discharged to the sanitary sewer system.
4.	Remove baffles if possible.
5.	Dip the accumulated grease out of the interceptor and deposit in a watertight container.
6.	Pump out the settled solids and then the remaining liquids.
7.	Scrape the sides, the lid, and the baffles with a putty knife to remove as much of the grease as possible, and deposit the grease into a watertight container.
8.	Replace the baffle and the lid.
9.	Record the volume of grease removed on the maintenance log.

## **5.0 Recordkeeping**

Recordkeeping and documentation is an important element to the success of implementing a FOG elimination program. The City of Huntington Beach requires that each FSE retain on-site the following records/documents:

- Employee Training Records (see Attachment I)
- Grease Trap Cleaning and Maintenance Log (see Attachment II)
- Grease Interceptor Cleaning and Maintenance Invoice(s) and manifest(s)



Additionally, all records of any self-inspections should be retained and kept along with City of Huntington Beach and the Health Care Agency inspection reports. All the records listed above must be retained on-site for a period of at least three (3) years, and made available for inspection and copying during normal operating hours.

**Grease Interceptor Service Record**